



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/521,759 03/09/00 RAIVISTO

T 796.337USW1

EXAMINER

WM02/0925

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TRAN, T

ART UNIT

PAPER NUMBER

2684
DATE MAILED:

09/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/521,759

Applicant(s)

RAIVISTO, TOMMI

Examiner

Tuan A Tran

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 2011/00721
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lerner et al. (6,157,722) in view of Gurney et al. (5,905,445) and further in view of Iwamura et al. (5,966,449).

Regarding claims 1-8, Lerner discloses an encryption key management system and method of securely communicating data that comprises steps of: providing connection security for transmitted data segments based on exchanging security parameters between communication parties, reaching agreement between communication parties on an interval for updating encryption and decryption keys, monitoring of the interval for updating encryption and decryption keys, updating encryption and decryption keys at the agreed interval, and ciphering data segments based on the latest encryption key (See fig. 1, 8 and col. 15 line 15 to col. 16 line 31). However, Lerner does not mention steps of: calculating encryption and decryption keys, generating authenticated code, numbering the messages with sequence numbers, transmitting the sequence number with the message, and using the latest sequence

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number as input for recalculation of the security parameters that includes cryptographic key and authenticated code. Gurney discloses a keyless entry system that comprises steps of: numbering messages with sequence numbers, transmitting the sequence number with the message, generating authenticated MAC code based on the latest sequence number (See figs. 1, 2, 3, 4 and col. 1 line 49 to col. 2 line 37). Iwamura discloses a method and network for communicating between a group of entities a text encrypted that comprises the step of calculating encryption and decryption keys by a random number (See figs. 1, 2, 8 and col. 8 line 45 to col. 9 line 24). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the system as disclosed by Lerner modified by Gurney, and further by Iwamura for the advantage of assuring that the cryptographic key and authenticated code change in an unpredictable manners to enhance security in network communication.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Schultz U.S. Patent 6,157,723 discloses a method and apparatus for secure communication with encryption key scheduling.
- b. McCalmont U.S. Patent 4,856,063 discloses a no-overhead synchronization for cryptographic systems.
- c. Boesch U.S. Patent 6,125,185 discloses a system and method for encryption key generation. (See fig. 4 col. 5 line 61 to col. 6 line 26).

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Daniel Hunter**, can be reached at **(703) 308-6732**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


DANIEL HUNTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600